# FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

(please fill in the highlighted areas)

	API	APPLICANT INFORMATION							
	A.	Applicant Name: Gallatin National Forest, Hebgen Lake Ranger District							
	В.	3. Mailing Address: P.O. Box 520, 330 Gallatin Road							
	C.	City: West Yellowstone State: MT Zip: 59758							
		Telephone: (406) 823-6963							
	D.								
		Address if different from Applicant: 3710 Fallon Street, Suite C							
		City: Bozeman State: MT Zip: 59718							
		Telephone: (406) 522-2544							
		Contact Person: Pat Clancy and Mike Vaughn (MFWP)							
		Address if different from Applicant: 1400 South 19th							
		City: <u>Bozeman</u> State: <u>MT</u> Zip: <u>59718</u>							
		Telephone: (406) 994-4042 or 4043							
	E.	Landowner and/or Lessee Name (if other than Applicant):  Cavan Fitzsimmons, District Ranger							
		Mailing Address: P.O. 520, 330 Gallatin Road							
		Walling Address. F.O. 320, 330 Gallatin Road							
		City: West Yellowstone State: MT Zip: 59758							
		Telephone: (406) 823-6963							
I.	PR	OJECT INFORMATION*							
	A.	River, stream, or lake: Cabin Creek, Tributary to the Madison River							
		Location: Township 11 South Range 4 East Section 15 NE 1/4							

County: Gallatin

## B. Purpose of Project:

In 1959, the Quake Lake earthquake ripped through the area leaving massive scarps throughout. Uplifting along lower Cabin Creek resulted in a short high gradient canyon reach that isolated this population of native westslope cutthroat trout (WCT). Through the years, this scarp has slowly eroded allowing a few rainbow trout to invade the headwaters resulting in a slightly hybridized population. WCT just above the scarp are 95% genetically pure becoming purer as one moves upstream toward the headwaters. Not that long ago, these WCT were pure. Our proposal would re-create this isolation by constructing a barrier along lower Cabin Creek preventing future invasion of non-native trout. There are no current plans to remove non-native trout that have already negotiated their way into the headwaters. If it is found that high numbers of rainbows negotiated the scarp reach during the time it takes to plan and construct the barrier, a limited removal might be necessary to remove more introgressed individuals. The Cabin Creek drainage is managed as a wildlife management area and inventoried roadless area (See attached Forest Plan language). The Cabin Creek population makes up approx. 35% of the remaining native WCT habitat within the Madison River sub-basin. This project as proposed would preserve the native genetics of this relatively large population. This project is the only viable management tool to ensure the long-term persistence of this population. If not completed, there are no other feasible methods of protecting this identified "Conservation Population" resulting in a significant loss.

## C. Brief Project Description:

Gallatin National Forest (GNF), Montana Fish, Wildlife and Parks (MFWP) & PPL-Montana (PPL-MT) are proposing to construct a permanent barrier along lower Cabin Creek to maintain the current level of genetic purity and preserve as much of the genetic legacy of this native WCT population. Cabin Cr. below the proposed site and nearby world renowned Madison R. are dominated by rainbow and brown trout. Local managers believe the only way to conserve this native fishery in Cabin Creek and maintain the nonnative blue ribbon sport fishery in the Madison River is to construct a segregating barrier. It has been estimated that non-hybridized and slightly hybridized WCT (< 10%) presently occupy 59% of their historic habitat range-wide; whereas in the Madison R. sub-basin, these same fish presently occupy 3.2% (51.0 miles) of their historic habitat. Cabin Cr. is the largest intact native WCT population in the entire Madison R. sub-basin occupying an estimated 15.6 miles. It has been estimated that it will cost \$397,256 to construct a barrier. This cost does not include project personnel to: survey, plan, design, permit & contract. Because of the extreme remoteness and inherent difficulty of dewatering Cabin Cr. during construction, the estimated cost is approximately twice that of a similar size barrier with good road access. The barrier, upon completion, will separate the native fisheries along upper Cabin Cr. from the non-native fisheries along the Madison R., thus preventing future genetic contamination within the headwaters.

D. Length of stream or size of lake that will be treated: Will Protect 15.6 stream miles

E. Project Budget:

Grant Request (Dollars):		75,000 (all FF funds will go directly to a construction contract)				
Contribution by Applicant (Dollars): \$	0		In-kind	\$	\$35,000	
(salaries of government employees are not considered as matching contributions)						
		329,000 (4 other funding				
		sources; see attached				
Contribution from other Sources (Dollars	):	\$ itemized budget)	In-kind	\$	0	
(attach verification - See page 2 budget	emp	late)				
Total Drainat Cont. C	420	000				

- Total Project Cost: \$ \$\\\\$439,000\$
   F. Attach itemized (line item) budget see template.
- G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete <a href="supplemental">supplemental</a> questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).
- H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

### III. PROJECT BENEFITS\*

A. What species of fish will benefit from this project?:

Westslope Cutthroat Trout (Upper Missouri River Basin)

B. How will the project protect or enhance wild fish habitat?:

The barrier, upon completion, will separate the native fisheries along upper Cabin Creek from the non-native fisheries along the Madison River, thus preventing future genetic contamination within the headwaters.

C. Will the project improve fish populations and/or fishing? To what extent?:

The proposed barrier will protect the existing population of westslope cutthroat trout. It will insure that this nearly genetically pure westslope cutthroat trout will persist for future generations to catch.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

Possibly, if anglers are attracted to streams and lakes where they can catch westslope cutthroat trout.

E. If the project requires maintenance, what is your time commitment to this project?:

Barrier maintenance will be a priority for the Gallatin National Forest with PPL-MT funding.

What was the cause of habitat degradation in the area of this project and how will the project F. correct the cause?:

In 1959, the Quake Lake earthquake ripped through the area leaving massive scarps throughout. Uplifting along lower Cabin Creek resulted in a short high gradient canyon reach that isolated this population of native WCT. Through the years, this scarp has slowly eroded allowing a few rainbow trout to invade the headwaters resulting in a slightly hybridized population. Our proposal would re-create this isolation by constructing a barrier along lower Cabin Creek preventing future invasion of non-native trout. Stream habitat conditions above this site are near pristine within the boundaries of the Cabin Creek Wildlife Management Area and Cabin Creek Inventoried Roadless Area.

G. What public benefits will be realized from this project?:

Protection of an existing population of westslope cutthroat trout which will persist for future generations to catch and enjoy.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No, 100% of the land base with the Cabin Creek drainage is under the management of the U.S. Forest Service.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

There are presently several licensed outfitters permitted within the drainage to take hunting and fishing clients. Because of the remoteness of the drainage, commercial fishing demand is not expected to increase thus requiring more licensed outfitters.

J.	Is this project associated with the reclamation of past mining activity?:
	No

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

#### IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:

B-c. Coch Date

Date: 11/14/13

11/19/13

Bruce Roberts, West Zone Fisheries Biologist

Sponsor (if applicable):

Cavan Fitzsimmons, Hebgen Lake District Ranger

\*Highlighted boxes will automatically expand.

Mail To: Montana Fish, Wildlife & Parks

**Habitat Protection Bureau** 

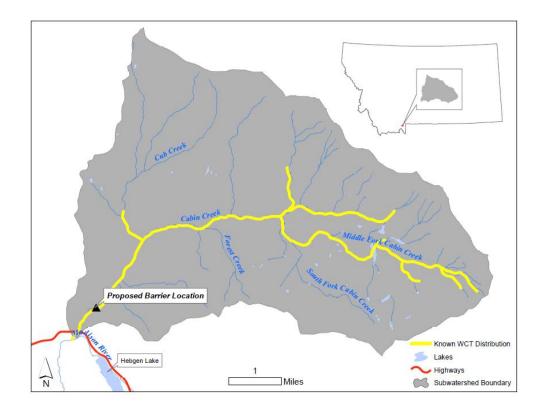
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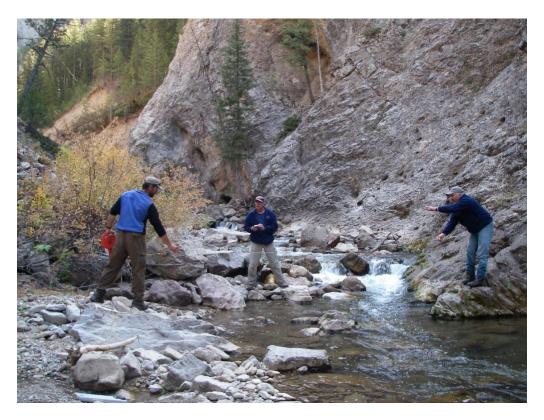
Helena, MT 59620-0701

Incomplete or late applications will be returned to applicant.

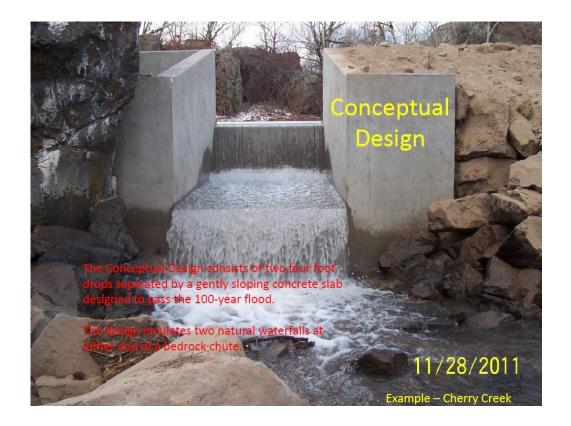
Applications may be rejected if this form is modified.

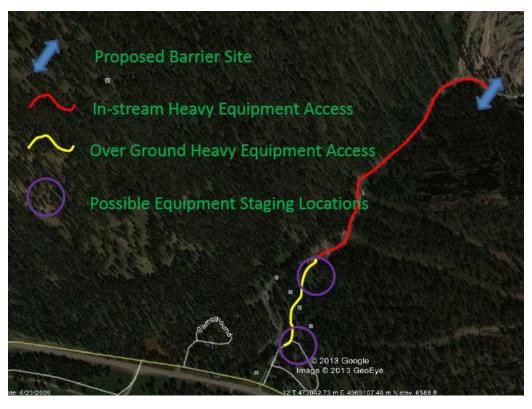
\*\*\*Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena <u>before</u> December 1 and June 1 of each year to be considered for the subsequent funding period.\*\*\*

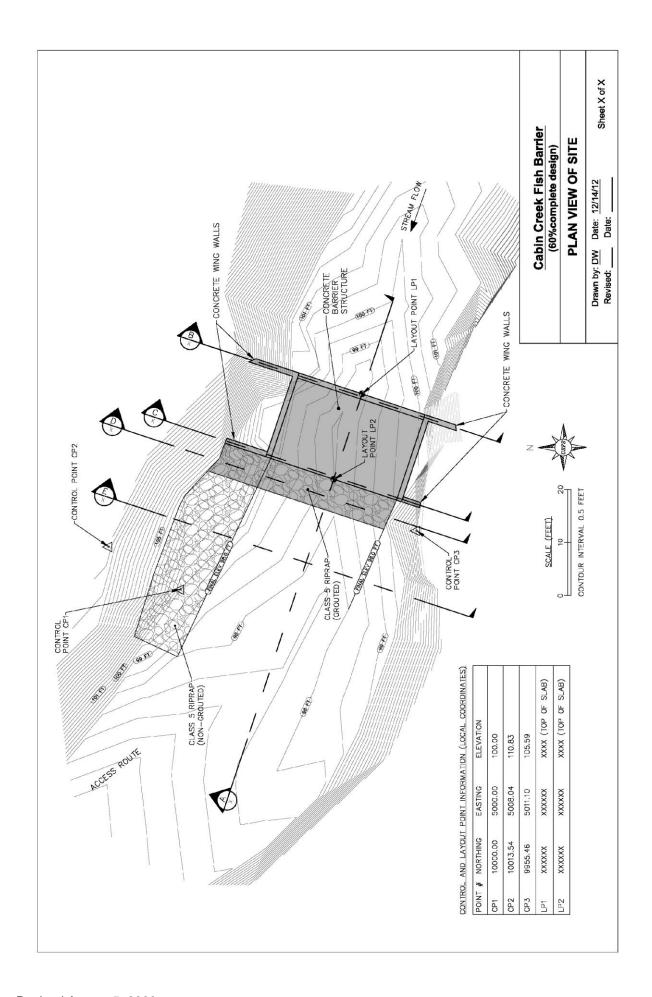


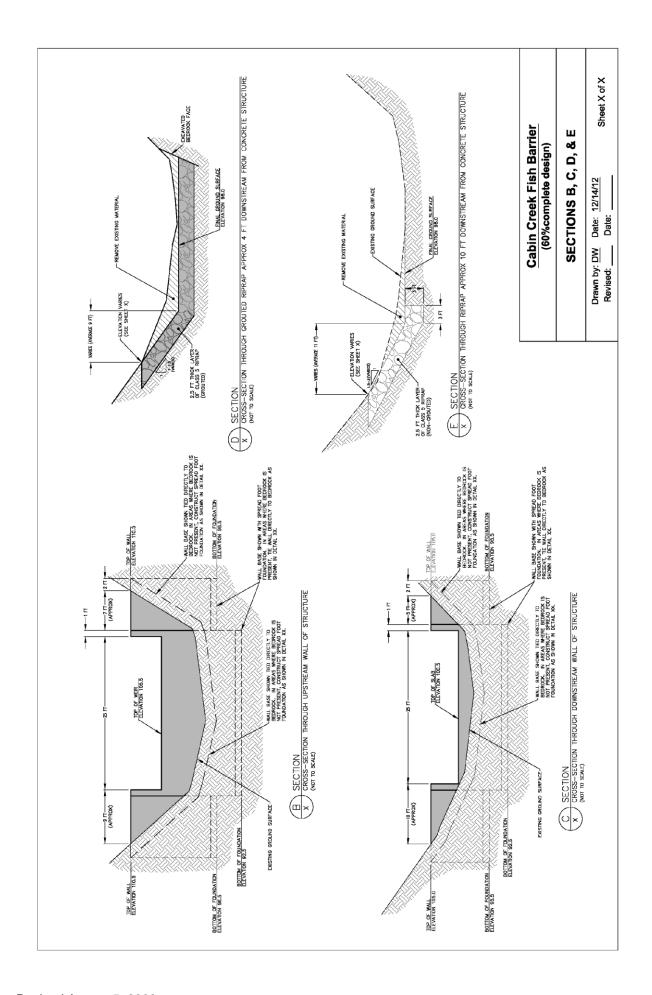


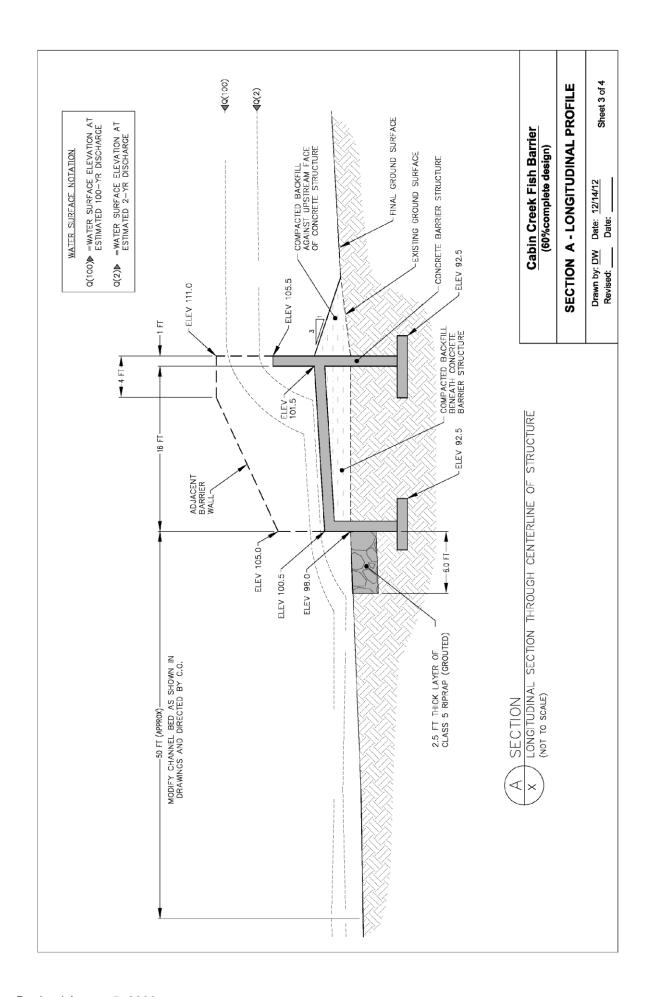
Proposed Barrier Site













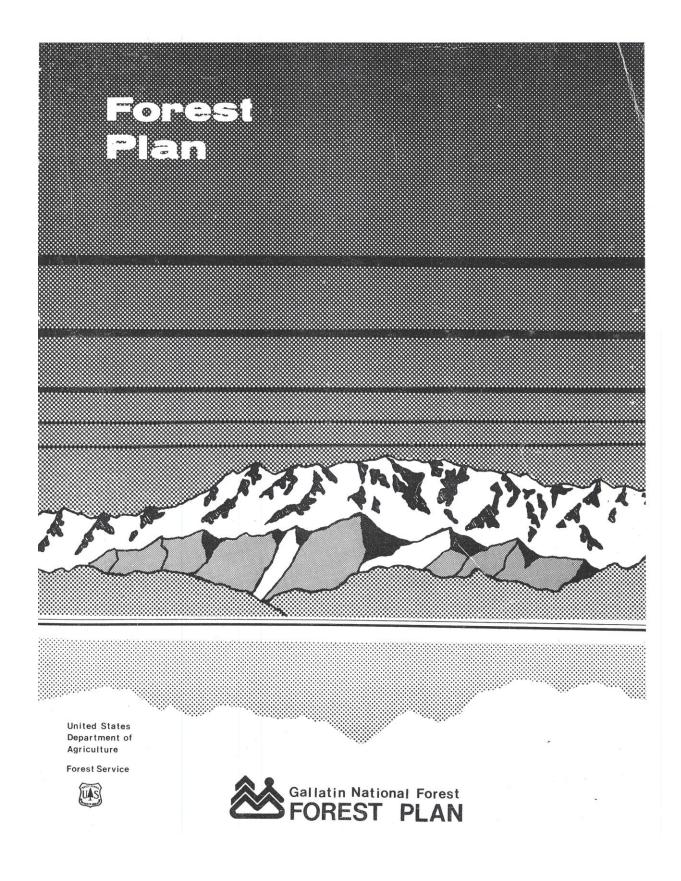
Future Fisheries Mark Lere, Chairperson

October 28, 2013

PPL Montana, the chair in the Madison Fisheries Technical Advisory Committee (MADTAC), supports the proposal for the fish barrier in Cabin Creek. This barrier is needed to protect this population of westslope cutthroat trout (WCT). Protection of WCT, a species of special concern in Montana, is a priority for the MADTAC biologists and PPL Montana.

The MADTAC, comprised of biologists from the PPL Montana, US Forest Service, BLM, USFWS and Montana Fish Wildlife and Parks have determined that this project is high priority and have dedicated \$150,000 in the MADTAC funding for this work. In addition, the MADTAC initially dedicated funding for a contractor to visit the site of the barrier to determine if it is suitable for construction of a barrier. This site is suitable and funding was then approved by the MADTAC to dedicate the initial funding for barrier construction.

Brent Mabbott
Principal Compliance Professional
PPL Montana
45 Basin Creek Road
Butte, Montana 59701
406-490-1801



MANAGEMENT AREA 20 (36,752 acres)

The Cabin Creek Recreation and Wildlife Management Area was designated by the Lee Metcalf Wilderness Act. It encompasses Upper Wapiti Creek, Carrot Basin, and Cabin Creek. It is entirely within occupied grizzly bear habitat and contains important big game habitat.

### Management Goals for MA 20 are:

- 1. Meet grizzly bear mortality reduction goals as established by the Interagency Grizzly Bear Committee.
- 2. Maintain and/or enhance grizzly bear and big game habitat. -
- 3. Manage recreation use consistent with legislation and goals 1 and 2.

In addition to the Forest-wide Standards in Chapter II, the following standards apply to this management area:

Resource Elements	Standards
RECREATION	Recreation Opportunity Spectrum classes are semi-primitive motorized and semi-primitive non-motorized.
	Recreational activities may be restricted to reduce human/grizzly bear confrontation and improve habitat effectiveness.
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and the second second	Allow snowmobile use during periods when there is no conflict with grizzly bear or big game.
	Allow motorized trail vehicles less than 40 inches wide on designated routes from July 15 through October 30 (see Forest Travel Map).
*1	Continue use of the Big Sky snowmobile trail.
VISUAL QUALITY	The visual management objective is retention.
WILDLIFE AND FISH	Schedule habitat improvement projects consistent with management area goals.

III-59

Use habitat component mapping and analysis to  $\mathsf{hel}_l$  identify most logical areas for habitat work.

The cumulative effects analysis process and grizzly bear guidelines (Appendix G) will provide the basis for managing other resource uses.

RANGE

Livestock grazing will be consistent with big game and grizzly bear management goals.

Livestock forage improvement programs may be initiated to reduce conflicts between livestock and big game.

TIMBER

Classified as unsuitable for timber production. No timber harvest will occur.

WATER AND SOILS

See Forest-wide Standards in Chapter II.

MINERALS

This area has been withdrawn from mineral entry.

FACILITIES

No new road construction will be allowed.

Manage the trail system consistent with management area goals.

Chainsaws may be used for maintenance work.

No new trailheads or trails will be constructed until the grizzly bear cumulative effects analysis is complete.

FIRE

The wildfire suppression response will be control, contain, or confine.

Prescribed fire may be used to meet management area goals.

III-60

		Average Annu	al
Schedule of	of Management Practices	1st decade	2nd decade
WILDLIFE	Habitat Improvement	75 acres	75 acres
	T & E Habitat Improvement	30 acres	30 acres

The monitoring requirements from Chapter IV that are applicable to the management area are as follows. The procedures outlined in Chapter IV will be followed to evaluate the data gathered during monitoring.

Monitoring Requirements - see Chapter IV, Table IV-1 for monitoring activities.

3, 6, 9